

Leviathan Mine Site
Interim Combined Treatment
Upper Pond Conveyance System (UPCS) Project
Daily Report
April 27, 2017

By

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Safety and Environmental:

- Around 10:00am this morning a small slough was noted along the lower slope south of Pond 4. The slough was not noted yesterday. A tension crack was also noted along the crusher and Pond 3 access road above the lower slope from around the Pond 4 parking lot up to Pond 3. Site safety and oversight personnel unanimously agreed that the access road along the slope toe from Pond 4 to Pond 1 was not safe to drive due to concerns of the slope sloughing into the road. Both the crusher access road and toe access road to Pond 1 were blocked off to prevent access until further geotechnical evaluations can be performed to determine if the slope is in danger of sloughing into the roads. Due to access restrictions, USA left the site at 10:45am today.

Manpower:

- USA – crew consisted of 7 people.
- Briggs Electric Inc. (USA subcontractor) – 5 people from Briggs were on-site today. Briggs personnel left the site around 9:30am.

Work Accomplished:

- Civil/Mechanical – USA staged suction hose at Pond 2S, unrolled and began preparation/connection for installation. USA also performed site orientation with Briggs (see below) to determine USA support needs for electrical work. Work stopped at 10:00am due to slope stability concerns (see Safety and Environmental issue above).
- USA performed installation of the stainless steel pump inlet sections of the Pond 1/2S pump stations, including the flange pipe supports. Four sections of suction hose were rigged with cable and pipe floats, connected to the pump inlet via cam-locks, and deployed at Pond 1 (see issues below). USA removed stainless steel sections of the Pond 1 discharge (see issues below).

- Electrical – Briggs performed a site orientation, inspected current conditions, and reviewed work action items. Briggs also installed the breaker box in the HDS power trailer. Briggs will be gathering required supplies and is scheduled start work on Monday 5/1, working four 10-hr days per week, Monday-Thursday. Anticipated crew is 7-10 people.

Issues:

- Lower slope stability issues near Pond 4 (see Safety and Environmental issues above).
- Electrical conduit connection from rigid metal to PVC near Pond 4 has come loose and needs to be cleaned out and reconnected (see photos).
- The concrete winch pedestals are orientated perpendicular to the Pond 1/2S edges and not angled toward the location of the suction hose strainers. As a result the winch cable is pulling against the winch spool edge and the winches could only be hand tightened at Pond 1 due to the cable building up on the strainer side. Required adjustments to the block and/or winch alignment are being reviewed.
- The fabricated stainless steel tee for the pump discharge/recycle line contains flanges that are obstructing the gate valve alignment and bolt installation. Required adjustments to the stainless steel tee fitting are being reviewed.
 - Resolved: a 3" long stainless steel pipe segment will be added between the tee and the elbow to provide additional clearance sufficient to allow valve installation. A temporary pipe segment will be used until the fitting is adjusted to allow USA to continue HDPE pipe installation at the pump stations.
- Outstanding winter shutdown issues: Water has entered the interior of the control panel steel support pedestals, froze, expanded, and caused swelling of the steel supports near the base. The north pedestal at Pond 1 has cracked at the corner of the pedestal (see photos). Tops of pedestals need to be capped or weepholes added to prevent water from entering the interior. Steel support repair need to be determined by control panel vendor.
- Submittal reviews in progress.
- Ponds 1 and 2S discharging through overflow pipe.

Schedule:**April 24-April 28**

- **Civil/Mechanical – Pond 1 (on schedule, above issues may delay schedule, TBD)**
 - Install SS Pipe Assemblies
 - Install HDPE Piping
 - Connect Piping to Pump
 - Install Pipe Hangers and Supports
- **Electrical (not started. Per USA, electrical work will begin 5/1, one week behind schedule)**

- Installation of Feeder Breaker in HDS PWR Trailer
- Installation of Raceway in HDS Building
- Begin Ground Vaults at Pull Box Locations
- Begin Installation of Continuous Power Cable
- Lightning Protection
- Grounding of Rigid Conduit
- Complete and Test Grounding System



Loose electrical conduit near Pond 4.



Breaker box installed in HDS power trailer.



Slope sloughing along access road near Pond 4.



Slope sloughing along access road near Pond 4.



Tension cracking along crest of lower slope near Pond 4.



Slope sloughing along upper slope, east of Pond 3.